

Modulation section 201 performs modulation processing on transmission data. Mapping control

5 section 202 controls mapping of the baseband signal onto
the subcarriers so that the important information
conventionally transmitted by one subcarrier is
transmitted by two subcarriers and one of the two
subcarriers should be the subcarrier with a carrier
10 frequency signal of frequency 0 which was conventionally
not used. IFFT section 203 performs IFFT processing on
the modulated transmission data. Transmission section
204 performs transmission processing on the IFFT-
processed transmission data and transmits the processed
15 transmission data from antenna 205.